

moulding material is injected into a gate in the mould by displacing a plunger, the temperature of the mould being 60 °C. The starting materials of the foam-forming reactive injection-moulding material, i.e. methylene diphenyl diisocyanate (tradename Desmodur 44V10B, supplier Bayer AG) and polyoxyethylene diol (tradename Baydur VPPU 1681, Bayer AG) are each circulated at 30 °C between the storage vessel and the mixing head, and just before they are injected, they are mixed under pressure in the mixing head. The presence of moisture in the mould causes the formation of carbon dioxide by a reaction with the injection-moulding material, so that foam formation takes place during reactive injection moulding. After 1 minute, the foam-forming reactive injection-moulding material has cured and the capping layer 2 has been formed, whereafter the mould is opened and the printed circuit covered with the capping layer 2 is removed. The capping layer 2 has an average density of 600 kg/m³, but it exhibits, in directions at right angles to the capping layer, a continuous, gradual variation of the mechanical properties. The side of the capping layer 2 facing the circuit exhibits a strong degree of foaming and hence is relatively soft and elastically compressible. In the direction from the side of the capping layer facing the circuit to the side of the capping layer facing away from the circuit, the stiffness and hardness of the capping layer increases. The side of the capping layer facing